

Design Assumptions for
Nebraska Base Drawing NE100-40-002
Concrete Pipe Support for Concrete Pipe 18" – 48" Dia.

Revised: 10/06 Replaces: 5001-15

Concrete Pipe Support for Concrete Pipe 18" - 48" Dia.

Standard length is 8 ft. If longer pipe support(s) are required, contact the State Engineering Staff.

Instructions for
NE Base Drawing NE100-40-002
Concrete Pipe Support for Concrete Pipe 18"-48" Dia.

Fill in the following data fields to automatically fill in the necessary data fields on the drawing.

Title block

Title line(s)

Subtitle line

County, State

Sheet number of

Who / When

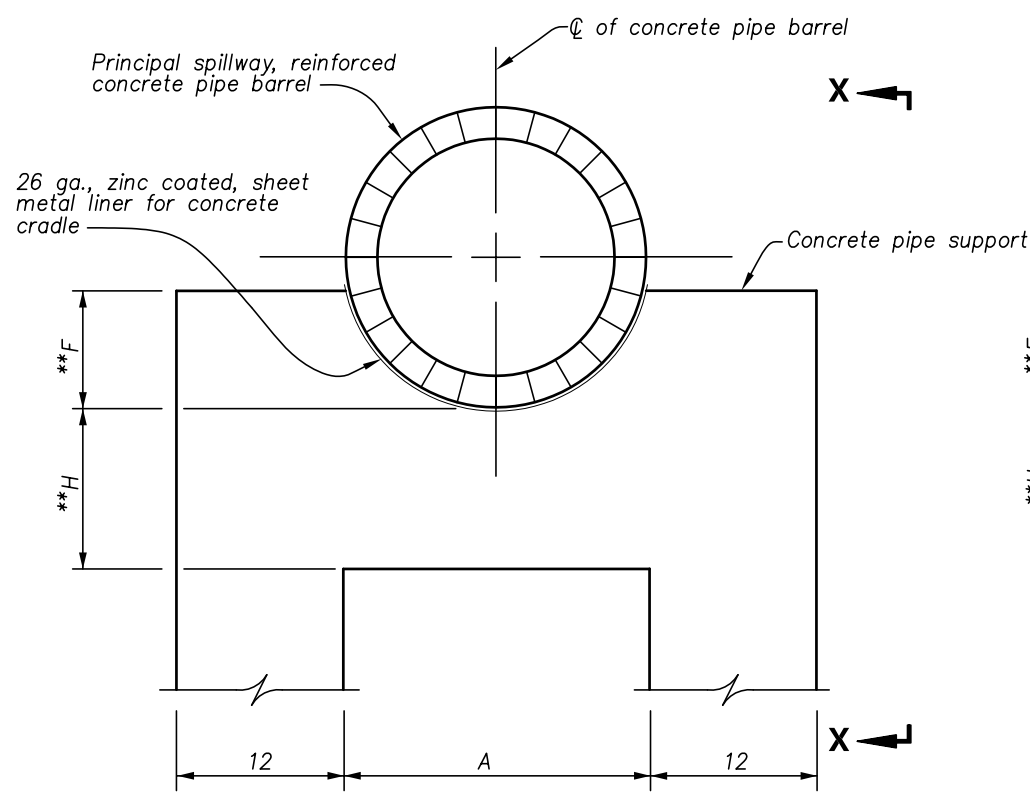
Designed

Drawn

Checked

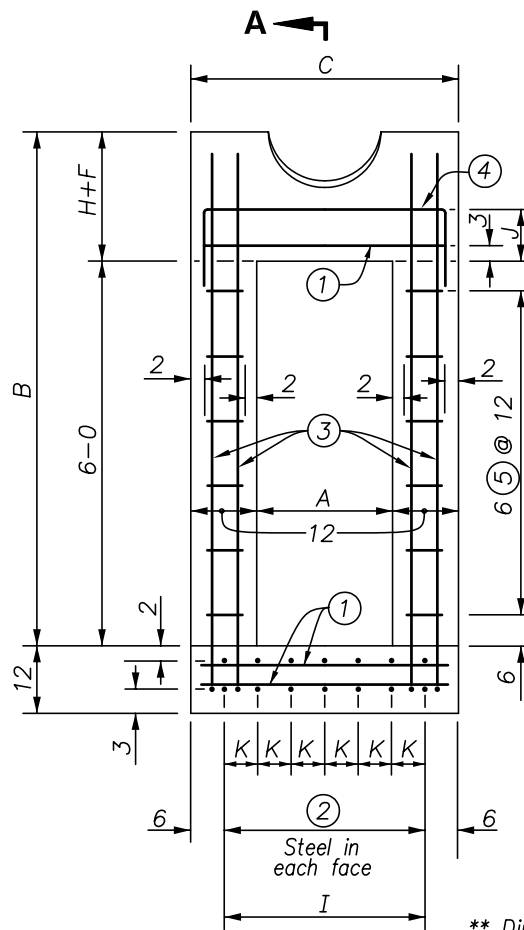
Fill data directly on drawing

Left click yellow boxes on drawing to mark with X as required.
Left click blue data fields to enter required data.



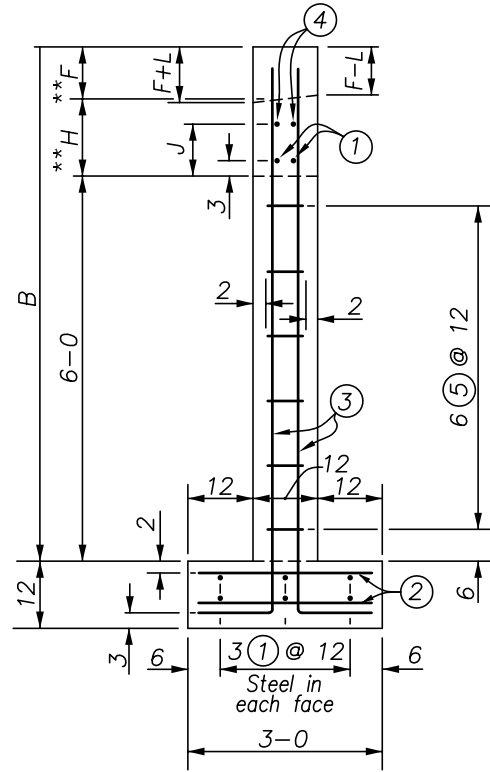
** Dimensions are from CL of pipe support. See Elevation X-X and table.

DETAIL SHOWING PIPE SUPPORT

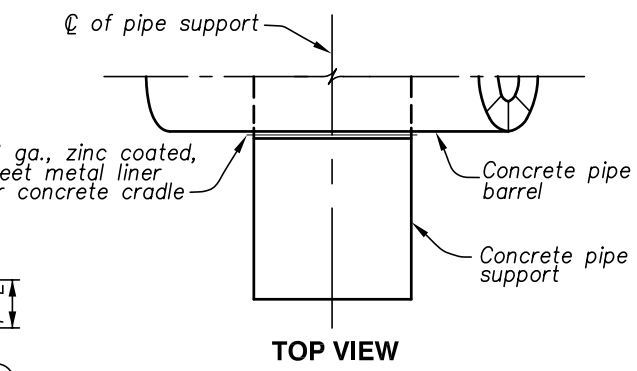


FRONT ELEVATION

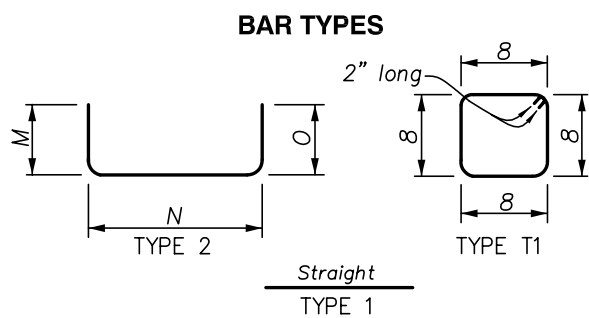
PIPE SUPPORT FOR 18" THRU 48" INSIDE DIA. PIPE BARRELS



SECTION A-A



TOP VIEW



BAR TYPES

CONCRETE QUANTITIES FOR 18" - 48" R.C. PIPE SUPPORT

INSIDE PIPE DIA. (INCHES)	CONCRETE (CU.YDS.)
18	1.11
20	1.11
24	1.18
27	1.18
30	1.30
36	1.41
42	1.50
48	1.70

		DIMENSION TABLE							
		INSIDE PIPE DIAMETER							
		18"	20"	24"	27"	30"	36"	42"	48"
A	2-0	2-0	2-6	2-6	3-0	3-6	4-0	4-6	
B	7-9	7-9	7-9	7-9	8-0	8-2	8-2	8-5	
C	4-0	4-0	4-6	4-6	5-0	5-6	6-0	6-6	
**F	0-9	0-9	0-9	0-9	1-0	1-0	1-0	1-3	
**H	1-0	1-0	1-0	1-0	1-0	1-2	1-2	1-2	
I	3-0	3-0	3-6	3-6	4-0	4-6	5-0	5-6	
J	0-8	0-8	0-8	0-8	0-8	0-10	0-10	0-10	
K	0-9	0-9	0-10 1/2	0-10 1/2	1-0	0-9	0-10	0-11	

NOTES:

ALL DIMENSIONS SHOWING DISTANCE FROM STEEL TO FACE OF CONCRETE DESIGNATE THE CLEAR DISTANCE.

PIPE SUPPORT CRADLE SHALL FIT GRADE AND PIPE CIRCUMFERENCE OF OUTSIDE PIPE DIAMETER.

REQUIREMENT TABLE

NO. OF PIPE SUPPORTS	_____
INSIDE PIPE DIAMETER	_____ INCHES
CONCRETE: CLASS 4000	
___ PIPE SUPPORT(S) X _____ CU.YDS. / PIPE SUPPORT	
= _____ CU.YDS.	
REINFORCING STEEL:	
___ PIPE SUPPORT(S) X _____ LBS. STEEL / PIPE SUPPORT	
= _____ LBS.	
UPSTREAM PIPE SUPPORT	
GRADE (%) <input type="text"/> ** L (INCHES) <input type="text"/>	
DOWNSTREAM PIPE SUPPORT	
GRADE (%) <input type="text"/> ** L (INCHES) <input type="text"/>	

BAR SCHEDULE PER PIPE SUPPORT

INSIDE PIPE DIA.	MARK	SIZE	QUAN- TITY	LENGTH FT.-IN.	TOTAL LENGTH	TYPE	M	N	O	TOTAL BAR	
										LENGTH	WT.(LBS.)
18" and 20"	1	6	8	3-6	28-0	1				175-0	222.3
	2	6	10	2-6	25-0	1					
	3	6	8	9-3	74-0	2	1-0	8-3			
	4	6	2	6-0	12-0	2	1-3	3-6	1-3		
	5	3	12	3-0	36-0	T1					
24" and 27"	1	6	8	4-0	32-0	1				180-0	229.8
	2	6	10	2-6	25-0	1					
	3	6	8	9-3	74-0	2	1-0	8-3			
	4	6	2	6-6	13-0	2	1-3	4-0	1-3		
	5	3	12	3-0	36-0	T1					
30"	1	6	8	4-6	36-0	1				187-0	240.3
	2	6	10	2-6	25-0	1					
	3	6	8	9-6	76-0	2	1-0	8-6			
	4	6	2	7-0	14-0	2	1-3	4-6	1-3		
	5	3	12	3-0	36-0	T1					
36"	1	6	8	5-0	40-0	1				203-4	264.9
	2	6	14	2-6	35-0	1					
	3	6	8	9-8	77-4	2	1-0	8-8			
	4	6	2	7-6	15-0	2	1-3	5-0	1-3		
	5	3	12	3-0	36-0	T1					
42"	1	6	8	5-6	44-0	1				208-4	272.4
	2	6	14	2-6	35-0	1					
	3	6	8	9-8	77-4	2	1-0	8-8			
	4	6	2	8-0	16-0	2	1-3	5-6	1-3		
	5	3	12	3-0	36-0	T1					
48"	1	6	8	6-0	48-0	1				215-4	282.9
	2	6	14	2-6	35-0	1					
	3	6	8	9-11	79-4	2	1-0	8-11			
	4	6	2	8-6	17-0	2	1-3	6-0	1-3		
	5	3	12	3-0	36-0	T1					

NO. 3 BAR = 3/8" DIA. 0.376 LBS./FT.
NO. 6 BAR = 3/4" DIA. 1.502 LBS./FT.

GRADE AND L DIMENSIONS	
GRADE (%)	** L (INCHES)
1	1/16
2	1/8
3	3/16
4	1/4
5	5/16
6	3/8
7	7/16
8	1/2
9	9/16
10	5/8
11	11/16
12	3/4
13	13/16
14	7/8

** DIMENSIONS ARE FROM CENTERLINE OF PIPE SUPPORT. SEE ELEVATION X-X.

Date _____

Designed _____

Drawn _____

Checked _____

Approved _____

Natural Resources Conservation Service
United States Department of Agriculture

File No. _____

CAD Dwg. _____
NE100-40-002.dwg

Sheet _____ of _____